Practice: 441 - Irrigation System, Microirrigation

Scenario # 1 **Specialty Crop Microirrigation System**

Scenario Description: **Missouri**

An irrigation system for vegetables or other specialty crops typically of small acerage (2 acre). Water delivery to the plants by surface lines and/or subsurface applicators. Spacing of the plants will vary, w/ delivery lines spaced 60". Area in question is being converted from other means of less efficient irrigation. Payment includes on-ground mainline and drip tape, fittings, and apurtenances. Pump & supply line is not included in this payment and may be offered through associated practices 533 Pumping plant and 430 Irrigation Pipeline, or existing pump & supply lines will be used. Cost represents typical situations for conventional, organic, and transitioning to organic producers.

Resource Concerns: Insufficient Water - Inefficient use of irrigation water, Degraded Plant Condition - Undesirable plant productivity and health, Water Quality Degradation - Excessive sediment in surface waters, and Inefficient Energy Use - Equipment and facilities.

Associated Practices: 533-Pumping Plant, 449- Irrigation Water Management, 430 - Irrigation Pipeline, 433 - Irrigation Flow Measrement, 610 - Salinity & Sodic Soil Management, 434 - Soil Moisture Measurement, 328-Conservation Crop Rotation, and 590 Nutrient Management.

Before Practice Situation:

A production field has an inefficient surface flood irrigation system causing irrigation water loss that impacts water quality and water quantity.

After Practice Situation:

A surface placed microirrigation system is utilized to provide highly efficient irrigation to an field. Water applications are reduced and runoff eliminated. Offsite water quality is improved, and on site water use is reduced.

Scenario Feature Measure:

Acres in System

Scenario Typical Size:	2	Acre	Tot Unit Cost	$2,601.29

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Micro Irrigation, screen filter, < 100 gpm	2	Each	$39.85	$79.70
Materials	Micro Irrigation, surface drip tubing or tape	18296	Foot	$0.28	$5,122.88
				Total Cost:	$5,202.58

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP-NOI	$1,950.97	EQIP-HUNOI	$2,341.16

Practice: 441 - Irrigation System, Microirrigation

Scenario # 2 **Seasonal High Tunnel Micro Irrigation System**

Scenario Description: **Missouri**

An irrigation system for vegetables or other specialty crops, irrigating inside of a high-tunnel poly-house. Water delivery to the plants by surface lines and/or subsurface applicators. Spacing of the plants will vary, w/ delivery lines spaced 60". Area in question is being converted from other means of less efficient irrigation. Payment includes on-ground mainline and drip tape, fittings, and apurtenances. Pump & supply line is not included in this payment and may be offered through associated practices 533 Pumping plant and 430 Irrigation Pipeline, or existing pump & supply lines will be used. Cost represents typical situations for conventional, organic, and transitioning to organic producers.

Resource Concerns: Insufficient Water - Inefficient use of irrigation water, Degraded Plant Condition - Undesirable plant productivity and health, Water Quality Degradation - Excessive sediment in surface waters, and Inefficient Energy Use - Equipment and facilities.

Associated Practices: 533-Pumping Plant, 449- Irrigation Water Management, 430 - Irrigation Pipeline, 433 - Irrigation Flow Measrement, 610 - Salinity & Sodic Soil Management, 434 - Soil Moisture Measurement, 328-Conservation Crop Rotation, and 590 Nutrient Management.

Before Practice Situation:

A high tunnel has an inefficient surface irrigation system causing irrigation water loss that impacts water quality and water quantity.

After Practice Situation:

A microirrigation system is utilized to provide highly efficient irrigation to crops grown in a high tunnel. Water applications are reduced and runoff eliminated. Offsite water quality is improved, and on site water use is reduced.

Scenario Feature Measure:

Sq ft

Scenario Typical Size:	2178	Square Foot	Tot Unit Cost	$0.08

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Micro Irrigation, screen filter, < 100 gpm	1	Each	$39.85	$39.85
Materials	Micro Irrigation, surface drip tubing or tape	458	Foot	$0.28	$128.24
				Total Cost:	$168.09

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP-NOI	$0.06	EQIP-HUNOI	$0.07
EQIP-NSHTI	$0.06	EQIP-HUNSHTI	$0.07